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| _ | APPLICATION NO.           | FILING DATE            | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO.         | CONFIRMATION NO. |  |
|---|---------------------------|------------------------|----------------------|-----------------------------|------------------|--|
|   | 10/039,484                | 12/31/2001             | Xiaowei Deng         | TI-32801 (032350.B364)      | 9755             |  |
|   | 23494                     | 7590 09/11/2003        |                      |                             |                  |  |
|   |                           | TRUMENTS INCORP        | PORATED              | EXAMINER  MONDT, JOHANNES P |                  |  |
|   | P O BOX 655<br>Dallas, TX | 474, M/S 3999<br>75265 |                      |                             |                  |  |
|   |                           |                        |                      | ART UNIT                    | PAPER NUMBER     |  |
|   |                           |                        | 2826                 |                             |                  |  |
|   |                           |                        |                      | DATE MAILED: 09/11/2003     |                  |  |

Please find below and/or attached an Office communication concerning this application or proceeding.

|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               | Application No.              | }                 | Applicant(s)                                |     |  |  |  |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------|-------------------|---------------------------------------------|-----|--|--|--|
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               | 10/039,484                   |                   | DENG ET AL.                                 |     |  |  |  |
| Office Action Summary                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         | Examiner                     |                   | Art Unit                                    |     |  |  |  |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               | Johannes P Mon               |                   | 2826                                        |     |  |  |  |
| The MAILING DATE of this communication appears on the cover sheet with the correspondence address Period for Reply                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |                              |                   |                                             |     |  |  |  |
| A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.  - Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.  - If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.  - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.  - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).  - Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).  Status |                              |                   |                                             |     |  |  |  |
| 1) Responsive to communication(s) filed on                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    | ·                            |                   |                                             |     |  |  |  |
| 2a) ☐ This action is <b>FINAL</b> . 2b) ☑ Thi                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 | is action is non-fi          | nal.              |                                             |     |  |  |  |
| 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under <i>Ex parte Quayle</i> , 1935 C.D. 11, 453 O.G. 213.  Disposition of Claims                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |                              |                   |                                             |     |  |  |  |
| 4) Claim(s) 1-49 is/are pending in the application                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |                              |                   |                                             |     |  |  |  |
| 4a) Of the above claim(s) is/are withdrawn from consideration.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |                              |                   |                                             |     |  |  |  |
| 5) Claim(s) is/are allowed.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |                              |                   |                                             |     |  |  |  |
| 6) Claim(s) is/are rejected.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |                              |                   |                                             |     |  |  |  |
| 7) Claim(s) is/are objected to.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |                              |                   |                                             |     |  |  |  |
| 8) Claim(s) 1-49 are subject to restriction and/or e                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          | election requireme           | ent.              |                                             |     |  |  |  |
| Application Papers                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |                              |                   |                                             |     |  |  |  |
| 9) The specification is objected to by the Examiner.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |                              |                   |                                             |     |  |  |  |
| 10) The drawing(s) filed on is/are: a) accepted or b) objected to by the Examiner.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |                              |                   |                                             |     |  |  |  |
| Applicant may not request that any objection to the                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           | e drawing(s) be held         | d in abeyance. Se | e 37 CFR 1.85(a).                           |     |  |  |  |
| 11) The proposed drawing correction filed on                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | is: a)∏ approve              | d b)⊡ disappro√   | ed by the Examin                            | er. |  |  |  |
| If approved, corrected drawings are required in reply to this Office action.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |                              |                   |                                             |     |  |  |  |
| 12)☐ The oath or declaration is objected to by the Exa                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        | aminer.                      |                   |                                             |     |  |  |  |
| Priority under 35 U.S.C. §§ 119 and 120                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |                              |                   |                                             |     |  |  |  |
| 13) Acknowledgment is made of a claim for foreign                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             | priority under 35            | U.S.C. § 119(a)   | -(d) or (f).                                |     |  |  |  |
| a)☐ All b)☐ Some * c)☐ None of:                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               | a) All b) Some * c) None of: |                   |                                             |     |  |  |  |
| 1. Certified copies of the priority documents have been received.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |                              |                   |                                             |     |  |  |  |
| 2. Certified copies of the priority documents have been received in Application No                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |                              |                   |                                             |     |  |  |  |
| <ul> <li>3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).</li> <li>* See the attached detailed Office action for a list of the certified copies not received.</li> </ul>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |                              |                   |                                             |     |  |  |  |
| 14) Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |                              |                   |                                             |     |  |  |  |
| a) The translation of the foreign language provisional application has been received.  15) Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |                              |                   |                                             |     |  |  |  |
| Attachment(s)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |                              |                   |                                             |     |  |  |  |
| 1) Notice of References Cited (PTO-892) 2) Notice of Draftsperson's Patent Drawing Review (PTO-948) 3) Information Disclosure Statement(s) (PTO-1449) Paper No(s)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             | 5) 🗌                         |                   | (PTO-413) Paper No<br>atent Application (PT |     |  |  |  |

## **DETAILED ACTION**

## Election/Restrictions

Restriction to one of the following inventions is required under 35 U.S.C. 121:

- I. Claims 1-46, drawn to a method of determining a capacitance for use in a circuit simulation including simulation apparatus, classified in class 703, subclass 14+.
- II. Claims 47-49, drawn to an apparatus in part designed using circuit simulation, classified in class 257, subclass 499+.

The inventions are distinct, each from the other, because of the following reasons:

Inventions I and II are related as product made and process of making a product. The inventions are distinct if either or both of the following can be shown: (1) that the process as claimed can be used to make another and materially different product, or (2) that the product as claimed can be made by another and materially different process (MPEP 806.05(f)). In the instant case, unpatentability of the Group II invention would not necessarily imply unpatentability of the Group I invention, because the apparatus of the Group II invention could be made by a process materially different from that of the Group I invention. For example, the method prescribed in claim 1 can be materially altered by determining the required capacitance based on analytical determination of the design parameters from first principles or any means other than simulation of both test and design structures.

Application/Control Number: 10/039,484

Art Unit: 2826

Because these inventions are distinct for the reasons given above and have acquired a separate status in the art as shown by their different classification, the fields of search are not co-extensive and separate examination would be required, restriction for examination purposes as indicated is proper.

Furthermore, this application contains claims directed to the following patentably distinct species of the claimed invention: a first embodiment (Figures 2-3; see section [0026]); a second embodiment (see section [0035]); a third embodiment (Figures 4-5; see section [0036]); a fourth embodiment (see section [0047]); a fifth embodiment (see section [0048]); a sixth embodiment (see section [0049]); a seventh embodiment (see section [0054]); an eighth embodiment (see section [0087]; and a ninth embodiment (see section [0088]).

Applicant is required under 35 U.S.C. 121 to elect a single disclosed species for prosecution on the merits to which the claims shall be restricted if no generic claim is finally held to be allowable. Currently, claim 1 appears to be generic.

Applicant is advised that a reply to this requirement must include an identification of the species that is elected consonant with this requirement, and a listing of all claims readable thereon, including any claims subsequently added. An argument that a claim is allowable or that all claims are generic is considered nonresponsive unless accompanied by an election.

Upon the allowance of a generic claim, applicant will be entitled to consideration of claims to additional species which are written in dependent form or otherwise include all the limitations of an allowed generic claim as provided by 37 CFR 1.141. If claims

Art Unit: 2826

are added after the election, applicant must indicate which are readable upon the elected species. MPEP § 809.02(a).

Should applicant traverse on the ground that the species are not patentably distinct, applicant should submit evidence or identify such evidence now of record showing the species to be obvious variants or clearly admit on the record that this is the case. In either instance, if the examiner finds one of the inventions unpatentable over the prior art, the evidence or admission may be used in a rejection under 35 U.S.C. 103(a) of the other invention.

## Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Johannes P Mondt whose telephone number is 703-306-0531. The examiner can normally be reached on 8:00 - 18:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Nathan J Flynn can be reached on 703-308-6601. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-0956. NATION J. FLYNN

DEPERVISORY PATERIT EXAMINER TECHNOLOGY CENTER 2800

**JPM** 

September 7, 2003